IN THE CLAIMS:

Please amend claims 1-10 as follows:

1. (Currently Amended) A method for forming interlayer connections in a layered thin-film electronic device for storing or processing of data, wherein the device comprises electrical connections between circuitry located in two or more circuit layers separated by layers of electrically insulating material, wherein conducting material is applied as current paths on each circuit layer for connecting the circuitry located therein and joined with interlayer connections consisting of plugs or wires of highly electrically conducting material penetrating said interlayers of electrically insulating material, wherein the plugs or wires in the plane of said interlayers have a cross section with dimensions that are longer in one direction, with a longitudinal dimension of representative magnitude Y and a transversal dimension of representative magnitude X, such that Y>X, and the method comprising the step of

forming a plug or wire in one and the same step as used for applying the conducting material for a conducting path on an overlying circuit layer.

2. (Previously Presented) The method according to claim 1, wherein said plug or wire is provided for connecting

current paths in the form of at least one narrow stripe electrode in one or more circuit layers, and in case of more than one, providing all stripe electrodes oriented in parallel, and by orienting said plug or wire such that its longitudinal dimension becomes parallel to the longitudinal direction of said at least one stripe electrode.

3. (Previously Presented) The method according to claim 2, wherein said plug or wire is formed completely contained within a footprint of said at least one stripe electrode.

4. (Previously Presented) The method according to claim 1, wherein said plug or wire is formed with a ratio between the longitudinal and transversal dimensions, Y and X, respectively, such that $Y/X > 2.5$.

5. (Previously Presented) The method according to claim 1, wherein said plug or wire is formed with the end sides along the short dimension tapering outwards towards the overlying circuit layer.

6. (Currently Amended) An interlayer connection in a layered thin-film electronic device for storing or processing of data, wherein the device comprises electrical connections

between circuitry located in two or more circuit layers separated by layers of electrically insulating material, wherein conducting material is applied as current paths on each circuit layer for connecting the circuitry located therein and joined with interlayer connections consisting of plugs or wires of highly electrically conducting material penetrating said interlayers of electrically insulating material, wherein the plugs or wires in the plane of said interlayers have a cross section with dimensions that are longer in one direction, with a longitudinal dimension of representative magnitude Y and a transversal dimension of representative magnitude X, such that Y>X,

said interlayer connection comprising the plug or wire being provided integral with the conducting material of a conducting path on an overlying circuit layer.

7. (Previously Presented) The interlayer connection according to claim 6,

wherein current paths are provided in a layer as narrow parallel stripe electrodes, and the cross section of the plug or wire is provided with its long dimension parallel to the longitudinal direction of the connected stripe electrode on the overlying circuit layer.

8. (Previously Presented) The interlayer connection according to claim 7,

wherein said plug or wire is completely contained within a footprint of at least one stripe electrode.

9. (Previously Presented) The interlayer connection according to claim 6,

wherein said plug or wire have a ratio between the long and short dimension Y and X, respectively, such that Y/X > 2.5.

10. (Previously Presented) The interlayer connection according to claim 6,

wherein said plug and wire are provided with the end sides along the short dimension tapering outward towards the overlying circuit layer.